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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,047	03/15/2005	Silvain Buche	JMYT-329US	1649
23122	7590	09/25/2007		
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			EXAMINER NGUYEN, KHANH TUAN	
			ART UNIT 1751	PAPER NUMBER
			MAIL DATE 09/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claims 1-18 are currently pending in the instant application.

The rejection of claim 18 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is maintained for in the Office Action mailed on 06/28/2007.

Withdrawn Rejection

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

All the prior art rejections filed in the Office Action sent on 06/28/2007 is withdrawn in view of Applicant's arguments therein.

Response to Arguments

Applicant's arguments filed on 08/31/2007 regarding the rejection of claim 18 under 35 U.S.C. 112, first paragraph have been fully considered but they are not persuasive.

In response to Applicant's remark on page 6, Applicant acknowledged the electrocatalyst metal may be unsupported, or it may be supported. If it is supported, it is not supported on graphite, but something else. However, this is inconsistent with claim 18 reciting, "...electrocatalyst metals is supported on a graphite support." Base on the above rational, the rejection is maintained.

Applicant is suggest to re-phase claim 18 to comply with the written description require under 35 U.S.C. 112, first paragraph.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-18 are rejected under 35 U.S.C. 103(a) as unpatentable over Denton et al. (U.S Pat. No. 5,716,437 hereinafter, "Denton") in view of Hunt (U.S Pat. No. 6,403,245 hereinafter, "Hunt").

Regarding claims 1-6, 9, and 14-18, Denton discloses an ink composition for use in electrode manufacture for fuel cells (abstract). Denton discloses using a catalyst ink comprising conductive particles and NafionTM proton conducting polymer being applied to a substrate to form a gas diffusion electrode. Denton further discloses an electrocatalyst metal may be selected from platinum (Col. 1, lines 46-51). Denton also discloses the electrocatalyst metal is supported on a high surface area carbonaceous material (Col. 2, lines 23-31).

Denton reference failed to teach utilizing a graphite material in the catalyst ink.

However, Hunt discloses a composition and process for forming fuel cell electrode comprising of catalytic material such as platinum, proton-exchange polymer (e.g. NafionTM) and electrically conductive graphite (Abstract, Col. 2, lines 60-66). Hunt further discloses the graphite is in particulate form (Col. 12, line 34). The load of platinum catalyst is between 10-200 microgram per cm² (Col. 7, lines 16-17).

Therefore, it would have been obvious to one of ordinary skill in the art to arrive at the ink composition for use in electrode as by taught Denton in view of Hunt by substituting the carbon with graphite as taught by Hunt. The reference teaches each of

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the claimed ingredients within the claimed proportions for the same utility. It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose, see *In re Kerkhoven*, 626 F.2d 846,850,205 USPQ 1069, 1072 (CCPA 1980).

Regarding claim 7, Denton further discloses an electrocatalyst ink wherein the solids content of the electrocatalyst ink is between 5 and 50 % weight (Col. 4, lines 52-60).

Regarding claim 8, Denton further discloses an electrocatalyst ink wherein the weight ratio of the electrocatalyst: proton-conducting polymer is between 1:1 and 10:1 (Col. 5, lines 4-7).

Regarding claim 10, Denton further discloses a process for applying the ink composition to a substrate (Col. 2, lines 22-29).

Regarding claim 11, Denton further discloses a gas diffusion electrode comprising a gas diffusion substrate and an electrocatalytic layer prepared using an electrocatalyst ink according to claim 1 (Col. 2, lines 22-29).

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Regarding claim 12, Denton further discloses a catalyst coated membrane comprising a solid polymer membrane and an electrocatalytic layer prepared using an electrocatalyst ink according to claim 1 (Col. 2, lines 50-53).

Regarding claim 13, Denton further discloses a membrane electrode assembly comprising an electrocatalytic layer prepared using an electrocatalyst ink according to claim 1 [(Col. 2, lines 40-43) and (Col. 3, lines 22-29)].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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KTN

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09/18/2007

Douglas McGinty

DOUGLAS MCGINTY
SUPERVISORY PATENT EXAMINER

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